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# Sustainability of everyday chemicals

## Challenge the students' perception of sustainability

**Time:** 3-4 months

**Education level:** Chemistry in upper secondary schools. Can be adapted to lower levels.

**Area of chemistry:** Chemical equilibrium, Organic chemistry, Biochemistry.

1

Find chemicals in everyday life

The project consists of four parts. The students find chemicals in everyday life and present them in front of the class. They focus on how the chemical is useful, the structure and how it might be harmful. This spans over a few weeks

2

Where would they end up?

When everyone has presented they place the chemicals in the biosphere depending on the properties of the chemicals.

The next lesson there is a classroom discussion of what agenda 2030 is and why every goal must be prioritised. They then motivate how their chemicals are and are not sustainable.

3

Are the products sustainable?

The project ends with creating bioplastics and a lab report of the possibilities of substitution of plastics with the background of agenda 2030.

4

Create bioplastic

A longer project where students have to use knowledge of chemical bonds, Le Chatelier's principle and organic chemistry to analyze everyday products.

